

HAND ACCESS PORT DEVICEABSTRACT

5 An improved access port device (10,100) is provided which enables hand access to a patient's body cavity while retaining pneumoperitoneum by minimizing gas leakage through the access port device. In one embodiment, the access port device (10) includes first and second sleeves (12,20) forming an inflatable chamber (30) and a third sleeve (22) mounted within the second sleeve (20) including an elastic band (54) for sealingly  
10 engaging a hand or wrist. The access port device (10) may also include an exit opening seal (38) for positioning within the patient's body cavity and a second sleeve retraction prevention device (46) for preventing inadvertent movement of the second sleeve (20) outwardly from the patient's body cavity through the incision. In another embodiment, an access port device (100) is provided which includes an inner annular sealing device (112)  
15 and a non-adhesive outer annular sealing device (110) for creating a non-adhesive seal against the outer surface of a patient. An access component (118) forming an inflatable chamber and including an integral sleeved glove (126) may also be provided. In another embodiment, a sealing force applying feature includes a biasing surface (168) formed on a generally flat annular extension (164) and exposed to gas pressure in an adjacent gas  
20 chamber (162) positioned to receive leakage gas leaking between the access port device and the patient to create sealing forces which tend to enhance the seal between the flexible annular extension and the patient's skin.

[Fig. 1 and Fig 7].

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